7-Aminoazolo[1,5-a]pyrimidine of the formula

where R1 is unsubstituted or substituted alkyl, halogen, alkoxy, cyano, or cycloalkyl, or is aryl, ariloxyl, arylthio, aryalkyl, arylalkoxy or arylalkylthio, each of which may be substituted, or is indene, tetrahydrothiophene or benzene, each of which may be substituted and is fused to the phenyl ring. R2 and R3 are each hydrogen, alkyl or aryl, n is 1 or 2, A is nitrogen or a CR4 group, where R4 has the meanings of R2 and may furthermore be halogen, cyano or alkoxyacarbonyl, or together with R3 is alkylene which may have up to 2 double bonds, and fungicides containing these compounds.

8 Claims, No Drawings
This application is a continuation of application Ser. No. 401,346, filed on July 23, 1982 now abandoned.

The present invention relates to novel 7-aminoazo[1,5-a]pyrimidines, a process for their preparation, and fungicides containing these compounds.

It has been disclosed that 7-aminoazo[1,5-a]pyrimidines, eg. 7-amino-2-methyl-5-phenylpyrazolo[1,5-a]pyrimidine, possess pharmacological properties (French Pat. No. 2,446,542; East German Pat. Nos. 99,794 and 55,956; and J. Pharm. Soc. Japan 84 (1964), 1113–1118). It has also been disclosed that N-trichloromethylthiophosphoramidine can be used as a fungicide (Chemical Week 1972, 21st June, page 63).

We have found that novel 7-aminoazo[1,5-a]pyrimidines of the formula

where R is unsubstituted, halogen-substituted or alkyl, halogen, alkoxycyano, or cyano, or is aryl, aryloxy, aril, aralkyl, aralkyloxy, or arilalkylthio, each of which may be substituted by alkyl, halogen, alkoxy, or aryl, or is benzene, indane, or tetrahydroxypentalene, each of which may be substituted by alkyl, halogen, cyano or aryl, and each of which is fused to the phenyl ring, is 1 or 2, R2 and R3 are each hydrogen, alkyl or aryl, and A is nitrogen or a CR4 group, where R4 has the meanings of R2 and halogen, cyano or alkoxycarbonyl, or together with R3 is alkylene which may have up to two double bonds, exhibit a good fungicidal action, in particular against Phycomycetes.

R1 is, for example, C1-C2-alkyl which is unsubstituted or substituted by fluorine, chloride, bromine or C1-C2-alkoxy, or is fluoro, chloro, bromo, C1-C2-alkoxy, cyano, or C1-C2-cycloalkyl, or is aryl (phenyl), aryloxy (phenyloxy), aril (phenyloxy), arilalkyl (benzyl), arilalkyloxy (benzoxyl), arilalkilthio (benzylthio), where alkyl is of 1 to 6 carbon atoms, each of which may be substituted by C1-C6-alkyl, C1-C4-alkoxy, cyano, fluorine, chlorine or bromine, or is indane, tetrahydroxypentalene or benzene, each of which may be substituted by C1-C4-alkyl, C1-C4-alkoxy, cyano, fluorine or bromine, and each of which is fused to the phenyl ring.

R2 and R3, and R4 where this has the meanings of R2, are, for example, hydrogen or C1-C6-alkyl, or phenyl which is unsubstituted or substituted by chlorine, C1-C4-alkyl or C1-C4-alkoxy. R4 may furthermore be chlorine, bromine, cyano or C1-C4-alkoxycarbonyl, or together with R3 may be C1-C6-alkylcyano which may contain one or two double bonds. Alkyl or the alkyl radical of an alkyl group in the radicals R1, R2, R3 and R4 is, depending on the stated number of carbon atoms, methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl or dodecyl, or an isomer thereof.

We have also found that 7-aminoazo[1,5-a]pyrimidines of the formula I are obtained when a substituted benzyl cyanide of the formula

where R1 and R2 have the above meanings, is reacted with a 5(3)-aminopyrazole of the formula

or with a 5(3)-amino-1,2,4-triazole of the formula

where R3 and R4 have the above meanings.

The reaction can be carried out in the presence or absence of a solvent. It is advantageous to use a solvent which is inert to the starting materials, and in which some or all of the latter are soluble. Particularly suitable solvents are alcohols, eg. ethanol, propanol, butanol, glycols and glycol monoesters, and diethyleneglycols and their monoesters, amides, eg. dimethylformamide, diethylformamide, dibutylformamide and N,N-dimethylacetamide, lower alkanoic acids, eg. formic acid, acetic acid and propionic acid, and mixtures of these solvents with water. In solution, the reaction is carried out at from 50° to 300° C., preferably from 50° to 150° C.

The novel 7-aminoazo[1,5-a]pyrimidines are isolated, if necessary after evaporating the solvent or diluting the solution with water, as crystalline compounds, which are very pure in most cases. When a lower alkanic acid is used as the solvent, it is advantageous, after evaporating some of the alkanic acid if necessary, to neutralize the residual alkanic acid by the addition of an aqueous alkali, the novel 7-aminoazo[1,5-a]pyrimidine crystallizing out in very pure form in most cases.

Some of the substituted benzyl cyanides of the formula

which are required for the preparation of the 7-aminoazo[1,5-a]pyrimidines are known, and others may be prepared from benzyl cyanides and carboxylates with alkali metal alcolohates or alkali metal hydrides, using conventional methods (J. Amer. Chem. Soc. 73 (1951), 3766).
General method for the preparation of the substituted benzyl cyanide of the formula II:
1.5 moles of a sodium alcoholate are introduced into 11 of toluene, and 1.0 mole of a benzyl cyanide followed by 2.0 moles of a carboxylate are added dropwise, while stirring, the temperature increasing to 40°–50° C. Stirring is continued for 2 hours at 75°–80° C., after which the mixture is cooled and 2 l of water are added. The aqueous phase is washed twice with 0.2 l of toluene, after which it is acidified to pH 2 with half-concentrated (about 50% strength by weight) sulfuric acid to give the substituted benzyl cyanide of the formula II (yield: from 70 to 90%).

The following substituted benzyl cyanides of the formula II can be prepared in this manner:

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<th>R²</th>
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<tr>
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<tr>
<td>3-CN</td>
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The Examples which follow illustrate the preparation of the novel active ingredients.

**EXAMPLE 1**
21.3 g of m-trifluoromethyl-2-formylbenzyl cyanide and 9.7 g of 3-(5)-amino-5(3)-methylpyrazole in 100 ml of glacial acetic acid were refluxed for 4 hours. The mixture was cooled and was then diluted with 300 ml of water, the pH was brought to 5–6 with 2N NaOH solution, and the oily product which precipitated crystallized after trituration. The crystals were filtered off under suction and then washed several times with water and dried under reduced pressure at 50° C. 25.0 g of 7-amino-2-methyl-6-(3'-trifluoromethylphenyl)-pyrazolo[1,5-alpyrimidine of melting point 176° C. were obtained (Compound 10).

**EXAMPLE 2**
10.5 g of p-tert.-butyl-2-formylbenzyl cyanide and 4.8 g of 3-(5)-amino-5(3)-methylpyrazole in 40 ml of dimethylformamide were refluxed for 3 hours. The mixture was cooled, and 150 ml of water were then added dropwise. The crystals were filtered off under suction and then washed with water and dried under reduced pressure at 50° C. 11.3 g of 7-amino-2-methyl-6-(4'-tert.-butylphenyl)-pyrazolo[1,5-alpyrimidine of melting point 218° C. were obtained (Compound 5).

**EXAMPLE 3**
11.8 g of m-phenoxo-2-formylbenzyl cyanide and 4.3 g of 3-amino-triazole in 40 ml of glacial acetic acid were refluxed for 6 hours, the mixture was cooled, 300 ml of water were then added, and the pH was brought to 6 with 2N NaOH. The precipitated crystals were filtered off under suction and dried (14.1 g). This material was dissolved in 30 ml of hot dimethylformamide, the solution was cooled, the product was precipitated with 10 ml of methanol, and the crystals were filtered off under suction, washed with a further amount of methanol and dried. 9.6 g of 7-amino-6-(3'-phenoxo phenyl)-1,2,4-triazolo[1,5-alpyrimidine of melting point 240°–250° C. were obtained (Compound 44).

50 g of 7-aminoazolo[1,5-alpyrimidines were prepared by the process described above.

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**Diagram:**

![Diagram](attachment:image.png)

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<th>No.</th>
<th>R¹</th>
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35 R<sup>1</sup>  = β-Naphthyl

36 2-CH<sub>3</sub>    | H          | H            | N            | 252        |
37 3-CH<sub>3</sub>    | H          | H            | N            | 222        |
38 3-CH<sub>3</sub>O  | H          | H            | N            | 246        |
39 3-CF<sub>3</sub>    | H          | H            | N            | 280        |
40 4-(CH<sub>3</sub>)<sub>3</sub>: 2-CH<sub>3</sub> | H          | H            | N            | 327        |
41 4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 282        |
42 4-CN                 | H          | H            | N            | 303        |
43 4-CF<sub>3</sub>    | H          | H            | N            | 250        |
44 4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 257        |
45 4-CF<sub>3</sub>    | H          | H            | N            | 268        |
46 4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 288        |
47 4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 300        |
48 4-H<sub>2</sub>C<sub>2</sub>: 2-CH<sub>3</sub> | H          | H            | N            | 256        |
49 4-H<sub>2</sub>C<sub>2</sub>: 2-CH<sub>3</sub> | H          | H            | N            | 272        |
50 4-i-C<sub>2</sub>H<sub>5</sub> | H          | H            | N            | 284        |
51 3,4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 283        |
52 3,4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 217        |
53 4-(CH<sub>3</sub>CH(CH<sub>3</sub>)CH<sub>3</sub>) | H          | H            | N            | 268        |
54 4-(CH<sub>3</sub>CH(CH<sub>3</sub>)CH<sub>3</sub>) | H          | H            | N            | 345        |
55 4-CN                 | H          | H            | N            | 370        |
56 4-C<sub>2</sub>H<sub>5</sub>O | H          | H            | N            | 242        |
57 4-C<sub>2</sub>H<sub>5</sub>O | CH<sub>3</sub>| CH<sub>3</sub>| H            | CR<sup>4</sup> | 168        |
58 4-C<sub>2</sub>H<sub>5</sub>O | CH<sub>3</sub>| CH<sub>3</sub>| H            | CR<sup>4</sup> | 207        |
59 4-(CH<sub>3</sub>)<sub>3</sub>: 2-CH<sub>3</sub> | CH<sub>3</sub>| CH<sub>3</sub>| H            | CR<sup>4</sup> | 300        |
The following compounds may be prepared analogously:

<table>
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<tr>
<th>No.</th>
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<th>R&lt;sup&gt;2&lt;/sup&gt;</th>
<th>R&lt;sup&gt;3&lt;/sup&gt;</th>
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The novel active ingredients have a strong fungitoxic action on phytopathogenic fungi, especially from the Phycomycetes class. The novel compounds are therefore suitable for instance for combating Phytophthora infestans in tomatoes and potatoes, Phytophthora parasitica in strawberries, Phytophthora cactorum in apples, Pseudoperonospora cubensis in cucumbers, Pseudoperonospora humuli in hops, Pseudoperonospora destructor in onions, Peronospora sparsa in roses, Peronospora tabacina in tobacco, Plasmopara viticola in grapes, Plasmopara halstedii in sunflowers, Sclerospora macrura in Indian corn, Bremia lactucae in lettuce, Mucor mucedo in fruit, Rhizopus nigricans in beets, Erspilis graminis in cereals, Uninula neator in grapes, Podosphaera leucotricha in apples, Sphaerotheca fuliginea in roses, and Erysiphe cichoriacearum in cucumbers. The fungicidal agents contain from 0.1 to 95, and preferably from 0.5 to 90, wt% of active ingredient. The application rates depend on the type of effect desired, and range from 0.1 to 5 kg of active ingredient per hectare.

The agents according to the invention may also be mixed and applied with other active ingredients, e.g., herbicides, insecticides, growth regulators, fungicides and fertilizers. When mixed with other fungicides, the spectrum of fungicidal action is in many cases increased; with a number of these fungicidal compositions, synergistic effects also occur; i.e., the fungicidal action of the combination product is greater than the effect of the individual components added together. The spectrum of action is particularly favorably influenced when the compounds according to the invention are mixed with the following fungicides: manganese N,N-ethylene-bis-dithiocarbamate, manganese zinc N,N-ethylenediemamine-bis-dithiocarbamate, the ammonia complex of zinc N,N-ethylene-bis-dithiocarbamate and N,N'-polyethylene-bis-(thiocarbamoyl)-disulfide, N-trichloromethyliothioetherhydrothialimide, N-trichloromethylthio-phthalimide, 5-ethoxy-3-trichloromethyl-1,2,3-thiadiazole, 2-methoxy-carbonylaminobenzimidazole, 2-thiocyanomethylthiobenzothiazole, 1,4-dichloro-2,5-dimethoxybenzene, 2,3-dichloro-6-methyl-1,4-oxathiin-5-carboxylic acid anilide, 2-methyl-5,6-dihydro-4H-pyran-3-carboxylic acid anilide, 2,4,5-trimethylfuran-3-carboxylic acid anilide, 2-methylfuran-3-carboxylic acid anilide, 2,5-dimethylfuran-3-carboxylic acid cyclohexylamidine, N-cyclohexyl-N-methoxy-2,5-dimethylfuran-3-carboxylic acid amide, 5-methyl-5-vinyl-3-(3,5-dichlorophenyl)-2,4-dioxo-1,3-oxazolidine, and 3-(3,5-dichlorophenyl)-5-methyl-5-methoxymethyl)-1,3-oxazolidine-2,4-dione.

The following list of fungicidal active ingredients with which the compounds according to the invention may be combined is intended to illustrate and not to restrict the combination possibilities. Examples are as follows: dithiocarbamates and their derivatives, e.g. iron(III) dimethylidithiocarbamate, zinc dimethylidithiocarbamate, zinc N,N-ethylene-bis-dithiocarbamate, tetrame-
thiouiram disulfide, zinc N,N-propylene-bis-dithiocarbamate, and the ammonia complex of zinc N,N-propylene-bis-dithiocarbamate and N,N'-polypropylene-bis-(thiocarbamoyl)-disulfide, nitro derivatives, e.g. dinitro- (1-methylthio)-phenyl erocomate, 2-sec-butyl-4,6-dinitrophenyl, 3,3-dimethylethylacetate and 2-sec-butyl-4,6-dinitrophenyl isopropy carbamate; heterocyclic compounds, e.g. 2-3heptadecyl-2-imidazolidone acetate, 2,4-dichloro-6-(o-chloroanilino)triazine, O,O-diethyl phthalimido phosphonothioate, 5-amino-1-(bis(dimethylamino)-phosphinyl)-3-phenyl-1,2,4-triazole, 2,3-dicyano-1,4-dithioanthraquinone, 2-thio, 1,3-dithio-(4,5-b)-quinoxaline, methyl 1-(butylcarbamoyl)-2-benzimidazo-carbamate, 4-(2-chlorophenylhydrazono)-3-methyl-5-isoxazoline, pyridine-2-thio-1-oxide, 8-hydroxyquinoline and its copper salts, 2,3-dihydro-5-carboxanilido-6-methyl-1,4-oxathine-4,4-dioxide, 2,3-dihydro-5-carboxanilido-6-methyl-1,4-oxathine, 2-fur-2-y1-benzimidazole, piperazine-1,4-diyldibis (1-(2,2,3-trichloroethyl)-formamide), 2-thiazol-4-y1-benzimidazole, 5-butoxy-2-dimethylamino-4-hydroxy-6-methyl-pyrimidine, bis-(p-chlorophenyl)-3-pyridinemethanol, 1,2-bis-(3-ethoxy carbonyl-2-thioureido)-benzene, 1,2-bis-(3-methoxycarbonyl-2-thioureido)-benzene and various fungicides, e.g. dodemethylguanidine acetate, 3-0-(5,5-dimethyl-2-hydroxycyclohexyl)2-hydroxyethyl)glutarimide, hexachlorobenzene, N-dichlorofluoromethylthio-N',N'-dimethyl-N-phenyl-sulfuric acid diamide, 2,5-dimethyl-furan-3-carboxylic acid anilide, 2-methylbenzoic acid anilide, 2-iodo-benzoic acid anilide, 1-(3,4-dichloroanilino)-1-formylamino-2,2,2-trichloroethane, 2,5-dimethyl-N-tridecyl-morpholine and its salts, 2,6-dimethyl-N-cyclohexyl-morpholine and its salts, alpha-(2-chloro-phenyl)-alpha-(4-chlorophenyl)-5-pyrimidine-methanol, and 1-(4-chlorophenoxyl)-3,3-dimethyl-1-(1H,1,2,4-triazol-1-yl)-2-butanone, and 1-(4-chlorophenoxyl)-3,3-dimethyl-1-(1H,1,2,4-triazol-1-yl)-2-butanol.

The novel active ingredient is applied for instance in the form of directly sprayable solutions, powders, suspensions (including high-percentage aqueous, oily or other suspensions), dispersions, emulsions, oil dispersions, pastes, dusts, broadcasting agents, or granules by spraying, atomizing, dusting, broadcasting or watering. The forms of application depend entirely on the purpose for which the agents are being used, but they must ensure as fine a distribution of the active ingredient as possible.

For the preparation of solutions, emulsions, pastes and oil dispersions to be sprayed directly, mineral oil fractions of medium to high boiling point, such as kerosene or diesel oil, further coal-tar oils, and oils of vegetable or animal origin, aliphatic, cyclic and aromatic hydrocarbons such as benzene, toluene, xylene, paraffin, tetrahydrophthalene, alkylated naphthalenes and their derivatives such as methanol, ethanol, propanol, butanol, chloroform, carbon tetrachloride, cyclohexanol, cyclohexanone, chlorobenzene, isophorone, etc., and strongly polar solvents such as dimethyformamide, dimethyl sulfoxide, N-methylpyrrolidone, water, etc. are suitable.

Aqueous formulations may be prepared from emulsion concentrates, pastes, oil dispersions or wettable powders by adding water. To prepare emulsions, pastes and oil dispersions the ingredients as such or dissolved in an oil or solvent may be homogenized in water by means of wetting or dispersing agents, adherents or emulsifiers. Concentrates which are suitable for dilution with water may be prepared from active ingredient, wetting agent, adherent, emulsifying or dispersing agent and possibly solvent or oil.

Examples of surfactants are: alkali metal, alkaline earth metal and ammonium salts of ligninsulfonic acid, naphthalenesulfonic acids, phenolsulfonic acids, alkyl aryl sulfonates, alkyl sulfates, and alkyl sulfonates, alkali metal and alkaline earth metal salts of dibutylphthalenesulfonic acid, lauryl ether sulfate, fatty alcohol sulfates, alkali metal and alkaline earth metal salts of fatty acids, salts of sulfated hexadecanols, heptadecanols, and octadecanols, salts of sulfated fatty alcohol glycol ethers, condensation products of sulfonated naphthalene and naphthalene derivatives with formaldehyde, condensation products of naphthalene or naphthalenesulfonic acids with phenol and formaldehyde, polyoxyethylene oxyphenol ethers, ethoxylated isocetylphenol, ethoxylated oxyphenol and ethoxylated nonylphenol, alkylphenol polyglycol ethers, tributylphenol polyglycol ethers, alkyaryl polyether alcohols, isostearyl alcohol, fatty alcohol ethylene oxide condensates, ethoxylated castor oil, polyoxyethylene alkyl ethers, ethoxylated polyoxypropylene, lauryl alcohol polyglycol ether acetel, sorbitol esters, lignin, sulfite waste liquors and methyl cellulose.

Powders, dusts and broadcasting agents may be prepared by mixing or grinding the active ingredients with a solid carrier.

Granules, e.g., coated, impregnated or homogeneous granules, may be prepared by bonding the active ingredients to solid carriers. Examples of solid carriers are mineral earths such as silicic acid, silica gels, silicates, talc, chalk, bole, loess, clay, dolomite, diatomaceous earth, calcium sulfate, magnesium sulfate, magnesium oxide, ground plastics, fertilizers such as ammonium sulfate, ammonium phosphate, ammonium nitrate, and ureas, and vegetable products such as grain flours, bark meal, wood meal, and nutshell meal, cellulose powders, etc.

For the experiment described below, the following prior art compounds were used for comparison purposes:

N-trichloromethylthiophthalamide (compound A)
7-amino-2-methyl-5-phenylpyrazole[1,5-a]-pyrimidine (compound B).

**EXPERIMENT 1**

**Action on Plasmopara viticola**

Leaves of potted vines of the Müller-Thurgau variety were sprayed with aqueous suspensions containing (dry basis) 80% (w/w) of active ingredient and 20% of emulsifier. To assess the duration of action, the plants were set up, after the sprayed-on layer had dried, for 10 days in the greenhouse. Then the leaves were infected with a zoosporangial suspension of *Plasmopara viticola*. The plants were first placed for 16 hours in a steam-saturated (moist) chamber at 24°C, and then in a greenhouse for 8 days at from 20°C to 30°C. To accelerate and intensify the sporangiophore discharge, the plants were then again placed in the moist chamber for 16 hours. The extent of fungus attack was then assessed on the undersides of the leaves.

In this test, for example active ingredients nos. 1, 5, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 27, 37, 41, 42 and 44, applied as a 0.025% spray, had a better fungicidal action (e.g., 100%) than the prior art comparative compounds A and B (e.g., 60%).
Examples of formulations are given below.

I. 90 parts by weight of compound 1 is mixed with 10 parts by weight of N-methyl-alpha-pyrrolidone. A mixture is obtained which is suitable for application in the form of very fine drops.

II. 20 parts by weight of compound 5 is dissolved in a mixture consisting of 80 parts by weight of xylene, 10 parts by weight of the adduct of 8 to 10 moles of ethylene oxide and 1 mole of oleic acid-N-monoethanolamide, 5 parts by weight of the calcium salt of dodecylbenzenesulfonic acid, and 5 parts by weight of the adduct of 40 moles of ethylene oxide and 1 mole of castor oil. By pouring the solution into water and uniformly distributing it therein, an aqueous dispersion is obtained.

III. 20 parts by weight of compound 10 is dissolved in a mixture consisting of 40 parts by weight of cyclohexanone, 30 parts by weight of isobutanol, 20 parts by weight of the adduct of 40 moles of ethylene oxide and 1 mole of castor oil. By pouring the solution into water and finely distributing it therein, an aqueous dispersion is obtained.

IV. 20 parts by weight of compound 11 is dissolved in a mixture consisting of 25 parts by weight of cyclohexanol, 65 parts by weight of a mineral oil fraction having a boiling point between 210° and 280°C, and 10 parts by weight of the adduct of 40 moles of ethylene oxide and 1 mole of castor oil. By pouring the solution into water and uniformly distributing it therein, an aqueous dispersion is obtained.

V. 80 parts by weight of compound 37 is well mixed with 3 parts by weight of the sodium salt of diisobutylnaphthalene-alpha-sulfonic acid, 10 parts by weight of the sodium salt of a lignin-sulfonic acid obtained from a sulfite waste liquor, and 7 parts by weight of powdered silica gel, and triturated in a hammer mill. By uniformly distributing the mixture in water, a spray liquor is obtained.

VI. 3 parts by weight of compound 41 is intimately mixed with 97 parts by weight of particulate kaolin. A dust is obtained containing 3% by weight of the active ingredient.

VII. 30 parts by weight of compound 42 is intimately mixed with a mixture consisting of 92 parts by weight of powdered silica gel and 8 parts by weight of paraffin oil which has been sprayed onto the surface of this silica gel. A formulation of the active ingredient is obtained having good adherence.

VIII. 40 parts by weight of compound 44 is intimately mixed with 10 parts of the sodium salt of a phenolsulfonic acid-urea-formaldehyde condensate, 2 parts of silica gel and 48 parts of water to give a stable aqueous dispersion. Dilution in water gives an aqueous dispersion.

IX. 20 parts of compound 1 is intimately mixed with 2 parts of the calcium salt of dodecylbenzenesulfonic acid, 8 parts of a fatty alcohol polyglycol ether, 2 parts of the sodium salt of a phenolsulfonic acid-urea-formaldehyde condensate and 68 parts of a paraffinic mineral oil. A stable oily dispersion is obtained.

We claim:

1. A 7-aminoazololo[1,5-α]pyrimidine of the formula
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 4,567,263
DATED : January 28, 1986
INVENTOR(S) : Karl EICKEN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS:
Claim 1, column 11, line 68, change "amminoazolo"
to --aminoazolo--.

Signed and Sealed this Twenty-ninth Day of April 1986

[SEAL]  

Attest:

DONALD J. QUIGG
Attesting Officer
Commissioner of Patents and Trademarks